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NATIONAL ASSOCIATION of CORPORATION SCHOOLS BULLETIN

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Volume IV

August, 1917

Meeting of Executive Committee

Committees for the New Year and Their
Activities

News Items About Our Members

A Plan to Complete Our Educational
System

Great Britain's Present Educational System

Goodyear Company's Factory School

PUBLISHED BY ORDER OF THE
EXECUTIVE COMMITTEE

The National Association of Corporation Schools

Headquarters, 130 East 15th Street, New York City

Objects

Corporations are realizing more and more the importance of education in the efficient management of their business. The Company school has been sufficiently tried out as a method of increasing efficiency to warrant its continuance as an industrial factor.

The National Association of Corporation Schools aims to render new corporation schools successful from the start by warning them against the pitfalls into which others have fallen and to provide a forum where corporation school officers may interchange experience. The control is vested entirely in the member corporations, thus admitting only so much of theory and extraneous activities as the corporations themselves feel will be beneficial and will return dividends on their investment in time and membership fees.

A central office is maintained where information is gathered, arranged and classified regarding every phase of industrial education. This is available to all corporations, companies, firms or individuals who now maintain or desire to institute educational courses upon becoming members of the Association.

Functions

The functions of the Association are threefold; to develop the efficiency of the individual employee; to increase efficiency in industry; to have the courses in established educational institutions modified to meet more fully the needs of industry.

Membership

From the Constitution—Article III.

SECTION 1.—Members shall be divided into three classes: Class A (Company Members) Class B (Members), Class C (Associate Members).

SECTION 2.—Class A members shall be commercial, industrial, transportation or governmental organizations, whether under corporation, firm or individual ownership, which now are or may be interested in the education of their employees. They shall be entitled, through their properly accredited representatives, to attend all meetings of the Association, to vote and to hold office.

SECTION 3.—Class B members shall be officers, managers or instructors of schools conducted by corporations that are Class A members. They shall be entitled to hold office and attend all general meetings of the Association.

SECTION 4.—Class C members shall be those not eligible for membership in Class A or Class B who are in sympathy with the objects of the Association.

Dues

From the Constitution—Article VII.

SECTION 1.—The annual dues of Class A members shall be \$100.00.

SECTION 2.—The annual dues of Class B members shall be \$5.00 and the annual dues of Class C members shall be \$10.00.

SECTION 3.—All dues shall be payable in advance and shall cover the calendar year. New Class A members joining between January 1st and April 1st, shall pay first year's dues of \$100.00; those joining between April 1st and July 1st, shall pay nine months' dues of \$75.00; those joining between July 1st and October 1st, shall pay six months' dues of \$50.00; those joining between October 1st and December 31st shall pay three months' dues of \$25.00, but for subsequent years shall pay full dues of \$100.00. Any members in arrears for three months shall be dropped by the Executive Committee unless in its judgment sufficient reasons shall exist for continuing members on the roll.

Officers 1917-1918

President

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Western Electric Company, Inc.

First Vice-President

Dr. H. M. Rowe
The H. M. Rowe Company

Second Vice-President

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The New York Edison Company

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The New York Edison Company

The National Association of Corporation Schools BULLETIN

Published Monthly by

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130 E. 15th Street, New York City

Edited by F. C. Henderschott, Executive Secretary

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Volume IV

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No. 8

LABOR TURNOVER COSTS \$1,250,000,000 YEARLY

Different phrases are used to characterize those relationships which pertain to the individual in industry. The problem, however, is the same without regard to the phrase which may be used. It is the problem of the individual, his training, his development and his reward.

As industry is carried on for the purpose of making profit it is oftentimes confounded with organizations whose functions and purposes are purely social or whose avowed accomplishments are not to make a profit but rather to accomplish a definite result in the interests of society as a whole. Thus, the sociologist often refers to functions of industry as commercial, and sometimes attributes desires and efforts on behalf of commercial men or the individual in industry as being wholly selfish.

There are two distinct schools of thought and action; one having as its object the administration of industry as scientifically and as profitably as can be done; the other, although supported indirectly by the industries, clinging to the sociological conceptions and ideals and oftentimes entirely misunderstanding or misinterpreting the ideals of those in the industries.

Men are not all equal mentally or physically. Individuals, therefore, are not susceptible to equal development and cannot earn equal reward. That there should be equality of opportunity does not seem to admit of argument. That there should be reward according to merit or earning capacity is generally admitted. The question, then, is to determine the degree of development to which the individual is capable by providing training and assuring equality of opportunity and reward accordingly as reward is earned.

The problem is many sided, but it promises to persist, as there are but few who believe the world's work will ever again be carried on in the primitive form of individual effort. In

other words, the day of corporate organization and co-operative effort has arrived and must in the very nature of things continue.

Mr. E. H. Fish, Employment Manager of the Norton Company, and the Class "A" representative of that company in our Association, contributed an article on "Human Engineering" to the June number of the *Journal of Applied Psychology*. Mr. Fish has reasoned and written from the viewpoint of the employment manager. He has reasoned well and written interestingly. What he has written is especially interesting to those who are confronted with the problem of "labor turnover," and this classification would include most of the members of our Association.

Mr. Fish is recognized as one of the foremost authorities on employment problems and his article is a contribution of value in the solution of this phase of the problem. To those who have not given the subject of "labor turnover" careful thought, the statement that there are approximately 50,000,000 changes in work each year, or one-fifth more people seeking new positions than there are wage earners in the United States, will come as something of a shock. And if we are to accept Mr. Fish's estimate that the average expense is \$25 for an individual to change his position, we get a clearer understanding of the tremendous tribute which industry pays to this problem, although the cost does not appear in the accounting of the industries.

INDUSTRIAL NEEDS AND DEMOCRATIC IDEALS

Dr. Paul Kreuzpointner, chairman of our Association's subcommittee on continuation schools, has contributed an article to the *Journal of Applied Psychology*. He has had a long experience, both theoretical and practical. He has been a teacher and he has been connected with the Pennsylvania Railroad, where he has had opportunity to utilize his theories and gain practical results. In his contribution to the subject of "Industrialism and Applied Psychology" he has happily developed two schools of thought; organizations are either for the purpose of making profit or for bringing about advancement without the object of profit. There is, on the one hand, the requirements of industry if business is to be administered efficiently, and, on the other hand, the functions of democracy if government is to exist without autocratic power.

The result, as Dr. Kreuzpointner has pointed out, has been misunderstanding, distrust, lack of harmony, hindrance to prog-

ress, abuse of talent, and waste of mental and material resources. To quote somewhat more in detail from what he has written on this subject: "The more exacting the restraint which is necessary within the shop gate, the greater is the desire to revel in democratic freedom outside the shop gate. The restraining rules within the shop gate cannot be broken without risk of loss of bread and butter; the civic restraint outside the shop gate is largely of the employe's own making. And it is small wonder if these civic restraints are often treated with indifference and are even brushed aside in consequence of the mental reaction from the effects of the industrial restraint. May not the growing mob-spirit be a manifestation of that mental reaction? In monarchical countries this phenomena is better understood, and provision is made for public amusements and entertainments of various sorts in order to divert this reaction into safe channels. But democracy does not yet seem to have learned how to attack this psychological problem.

"It is obvious that legislative enactments are insufficient educational agencies to cope with this serious problem. What we need is a change in our national habits and customs, in our mental and moral characteristics. And here is the opportunity for applied psychology to step into the breach in order to harmonize the contrast and antagonism between the industrial régime and the democratic régime."

It is the belief of Dr. Kreuzpointner that the solution of the conditions described lies in the activities of our Association. Before the needed change in our national habits and customs can be brought about there must, however, be a larger recognition of the necessity for such change.

EACH MEMBER HAS A PLAIN DUTY TO PERFORM

Recently a meeting was held in Chicago, under the auspices of the Western Efficiency Society, which developed a national organization and which has determined to enter the field in which our Association works. This new organization has defined its scope to be the "human factor in industrial preparedness." To quote from the official magazine of the Western Efficiency Society, "Realizing that the human factor is such a big subject, too big and too important for any one organization to attempt to consider independently at this time, if any benefits of national scope are to be derived, the active co-operation of technical and

business organizations and interested individuals in all sections of the country has been urgently sought."

On April 2d and 3d a National Conference of Employment Managers was held in Philadelphia. At this conference the scope of the modern employment department was agreed to be "broader than simply hiring employes," for securing applications, selecting those best fitted, handling transfers and dismissals, supervising the training and development of employes, have assumed a great importance. The name "Personnel Department" was suggested as more fitting in view of these activities.

In other words, at least two additional associations, national in scope, have been organized to do practically the same work which our Association is doing. While the field is so large and the problems to be solved of such importance as to invite new organizations, our own Association much thoroughly awake to the importance of enlarging its activities and at the same time extend its membership.

General Robert E. Lee, the idol of the Confederacy, and without question ranked as one of the great generals, in a letter to his son, written on April 5, 1852, gave this advice:

"In regard to duty, let me in conclusion of this hasty letter inform you that nearly a hundred years ago there was a day of remarkable gloom and darkness, still known as the dark day, a day when the light of the sun was slowly extinguished as if by an eclipse. The Legislature of Connecticut was in session, and, as its members saw the unexpected and unaccountable darkness coming on, they shared in the general awe and terror. It was supposed by many that the last day, the Day of Judgment, had come. Someone, in the consternation of the hour, moved an adjournment. Then there arose an old Puritan legislator, Davenport, of Stamford, and said that if the last day had come, he desired to be found at his place, *doing his duty*, and he therefore moved that candles be brought in, so that the house could proceed with its duty.

"Duty, then, is the sublimest word in our language. Do your duty in all things like the old Puritan. You cannot do more; you should never wish to do less. Never let me and your mother

wear one gray hair for any lack of duty on your part."

At the recent Buffalo convention there was considerable discussion as to the practicability of inducing the executives of our Class "A" member companies to attend our Association's conventions and to take a more active interest in our work. The idea is commendable but largely impractical. The executive of the industrial corporation is a hard working and exceedingly busy official. Corporate management implies specialization. The executive looks to his educational director, employment manager, safety engineer and the welfare secretary for advice and information as to these respective activities. In a general way the executive keeps informed and he directs, but the specific duties of these offices are delegated to those in charge and must be administered by them, subject to the advice and approval of their superior officers.

It is the plain duty of the members of our Association to extend its usefulness and effectiveness through the gaining of a larger membership, especially Class "A." No one should feel he has quite done his whole duty until he has gotten in personal touch with the executives of prospective Class "A" members in his immediate community. This is the duty of our members. It cannot be delegated without a feeling that all that might have been done has not been accomplished.

The task is not so great as it might at first appear. Probably our Association will never have in excess of five hundred Class "A" members. One-fifth of this number has already been gained. It means getting in personal touch with the officials of industrial institutions and placing before them what our Association means to those who are members and also what its program of work means to the industries of our country as a whole. Only a few hours' work, but the result of an effective, vigorous campaign of this kind, carried on with enthusiasm, participated in by all of our members, can hardly be overestimated.

The Executive Secretary's office can furnish members with lists of prospective Class "A" industrial institutions in their vicinities.

AN INSISTENT DEMAND FOR COLLEGE TRAINED MEN

Perhaps at no period has the value of the college trained man been emphasized so emphatically as during the past few

months. The government, in choosing men for its officers' reserve corps, did not specify that only college graduates would be accepted; nevertheless, so marked a preference was shown that the man without a degree secured but slight recognition.

By official action, by the press and through practically every avenue of selection or choice, the college trained man has been advocated and given the preference. The movement promises to develop more fully and to reach high school graduates, and there is a marked preference noticeable for skilled laborers—for those who have had technical training. So great has been the demand in this respect that many of the trade schools will remain open all summer. And the demand which has existed is but a promise of what will be the condition should the war be prolonged or the condition after the struggle is over. Indeed, if training facilities can be provided, the day of unskilled labor will rapidly draw to a close.

WANTED—A NATIONAL STATE OF MIND

We of the United States have become accustomed to refer to German efficiency without due analysis or understanding or as a result of information based on personal investigation.

In what manner has the efficiency of Germany exceeded the efficiency of the United States? It was not a German who discovered steam or developed the steamboat or the railroad. A Scotchman discovered that through the application of heat to water a powerful agency of energy could be secured, and an American made the application through the steamboat and thus made water navigation of tremendous value in the development of modern life. Later, the first railroad, if the writer's memory serves him correctly, was built from Baltimore to Frederick, Md., and is now a part of the Baltimore & Ohio System. It was an American, was it not, who patented the cotton-gin? It was another American who perfected the telegraph system and another American who perfected the telephone, and still another the sewing machine. Who invented, discovered or made practicable the submarine, torpedo, aeroplane and machine gun? Were they Germans or Americans? And who perfected the harvesting machine, self-binder, threshing machine, and who the disk-plow, washing machine, transparent photograph films, motion-picture machine, automobile, carborundum, air-brake? Was it not American genius that first conceived these things? And again, what country claims as its citizens men who perfected

the typewriter, adding machine, cash register, phonograph, dictaphone and many other of the appliances that have made modern industry possible? All Americans, were they not? Who built the first skyscraper, the first subway? Who perfected the use of elevators in tall buildings? Were they Germans? Hardly—all Americans. Who operated the first electric railroad, invented the incandescent lamp, the electric storage battery? Who discovered the art of vulcanizing rubber? All citizens of the United States!

The list could be continued almost indefinitely. Where Germany has profited has been through the training of her workers and in the scientific application of the inventive genius of citizens of other countries. There can be no question as to German thoroughness and elimination of waste. Germany has copied and developed. Germany has trained her workers until production in that country has become almost an exact science.

This is the lesson the people of the United States are learning. No one would expect the members of an orchestra to obtain efficiency without careful training and long practice. Again, perhaps nowhere are individual qualities measured to so great an extent as in the major leagues of baseball. Here the player begins at the bottom or on the sand lots and works his way upward through scientific instruction and by careful practice. The record of every player is known. But somehow those who conduct our industries have only recently realized the value of training the workers, at least not to the extent that is necessary to produce a state of efficiency in industry comparable to that in Germany prior to the war. What is most needed at this time is universal recognition of the value of training the workers in industry. In other words, the United States needs a "state of mind"—a more complete recognition of the statement of President Hadley of Yale University that the "trained mind cannot be eliminated from industry."

"EDUCATION AS USUAL" DURING THE WAR

The *Atlanta Constitution*, the leading newspaper of Georgia, if not of the entire south, voices the parting word of a western college president to his students at the close of the school year, to the effect that "education must go on as usual during the war." The editor of the *Constitution* pointed out that thousands of the best college and university trained men will be sacrificed on the battlefields of Europe and declares that a shortage of

scientifically and technically trained men and women now and in the period of industrial reconstruction following the war will amount to "a world calamity."

Therefore, in view of present and impending emergencies, this educator declared it to be the patriotic duty of every young man and young woman not called immediately into war service to return to college in September and continue their education.

"He is right," says the editor of the *Constitution*.

"'Business as usual' is universally accepted as being the correct slogan as our guide in our commercial life during the war; but on a par with it would be 'Education as usual' by which to steer our course in an intellectual way, and in the direction of 'preparedness'—preparedness for peace!

"And in this vein the western college president declared, furthermore, that those communities, business organizations and public-spirited citizens who might help young people under military age, or who for any other reason are not called to the flag, 'to fill to overflowing the American colleges and universities' next September, would thereby be doing an important service to the country.

"The coming of peace will open hitherto unheard-of opportunities for the young man and young woman equipped by education to make the most of them; indeed, the world and future generations will suffer if there is a scarcity of such to fill the positions demanding skill and special training.

"'Education as usual' should be a twin brother to 'Business as usual' while the war lasts!"

FITTING THE STUDENT INTO BUSINESS CAREERS

Dr. Thurston, superintendent of schools for the District of Columbia, has formulated plans whereby students taking business courses can obtain practical training by spending part time in school and part in business offices. The plan is similar to that in vogue in the normal schools, where students spend several weeks each term in actual teaching.

"The matter is one of utmost importance," said Mr. Thurston. "Numbers of students, after leaving the business schools, find they are not suited for their work. This could be eliminated by putting them in our offices as part of their courses."

"The bigger a man in mind and position, the more anxious he is for all kinds of information and service that will in any way guide him in his undertakings and responsibilities."

OFFICE OF THE PRESIDENT

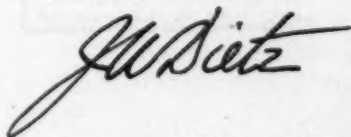
Fellow Members:

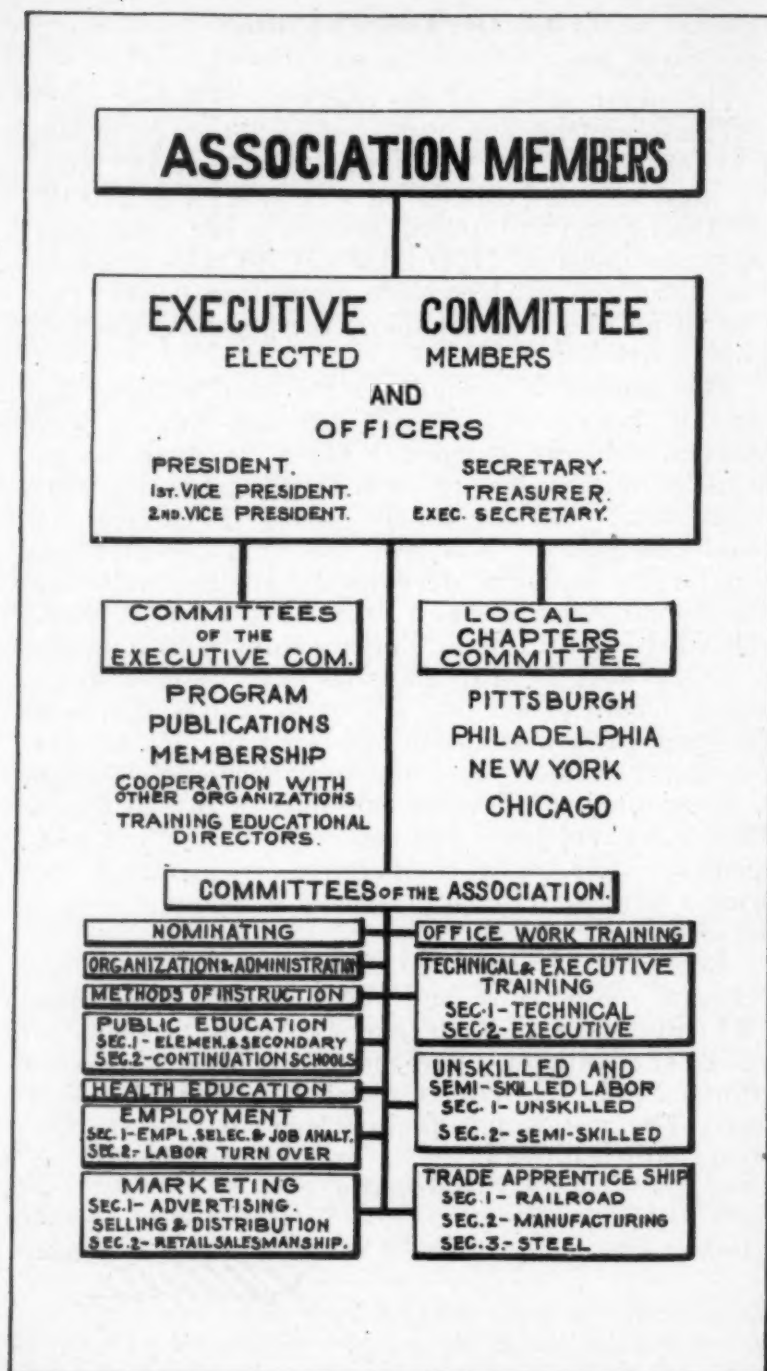
The organization of the Association work, committee assignments and appointments, as given in this BULLETIN, have two main thoughts back of them. We must use our experts on CONCRETE PROBLEMS of direct and present interest to our companies. Second, we must AVOID DUPLICATION of effort. Your Program and Executive committees believe that if we as members do our share, the present plans will prove worth while.

The number of committees has been reduced and some of them have been divided into sections with definite problems assigned. Many of these assignments are the direct outgrowth of the committee work of last year. All are timely during the present national emergency. You will note that the problems deal largely with the development of employees—the educational function—as a DISTINCT MANAGEMENT FUNCTION. This we think is as it should be. Our work in years past has dealt more with the formal school problems. All of us realize that with the great variety of conditions faced by our Association members that our plans must be flexible enough to be adapted to all types and sizes of organizations. These are problems in business organization and management. We, as a co-operative organization, can bring a tremendous experience and momentum to their solution.

Let us back up the committees—those of the National Association and our Chapter committees, too! Put some of your real problems to them for advice and solution. Remember this is a co-operative effort. Study the jobs as assigned to all the committees. The rest is just plain, clean-cut thinking and good, hard team-work.

Cordially,





MEETING OF EXECUTIVE COMMITTEE

First Meeting of the New Board Well Attended and Work of the Coming Year Fully Outlined—Total Membership of Our Association Now at Its Highest Point—Appointment of Committees by President Dietz—Outline of Work to be Undertaken Prior to the Chicago Convention by the Program Committee.

The July meeting of the Executive Committee, held in New York on the tenth of the month, was well attended. President Dietz presided. Vice-President Kincaid, Treasurer Mehren, Secretary Galloway, Messrs. Dooley, Park, Van Derhoef, Yoder and the Executive Secretary were present.

The minutes of the three meetings of the Executive Committee held at Buffalo during the annual convention were approved.

The treasurer's report, showing cash on hand of \$4,401.53 and no liabilities, was approved.

The membership report showed four new Class "B" members and six new Class "C" members, giving a membership, as of July 10th, of 104 Class "A" members, 105 Class "B" members, and 95 Class "C" members, or a total membership of 305, the largest our Association has ever enjoyed.

The following resolution, introduced at the Buffalo convention by Mr. A. C. Vinal and unanimously endorsed at the business session, was presented by the Executive Secretary:

"The National Association of Corporation Schools, in its Fifth Annual Convention assembled at Buffalo, N. Y., June 8th, recognizing the vital need of maximum efficiency in American industry to the successful prosecution of the war, and further recognizing that this Association should be in a position to render the largest possible service to member companies and to this end should have available the services of men fully qualified in the various lines of work pursued by the Association, directs the Executive Committee to request the member companies commanding the services of certain members of our Association who are expert in their particular lines, to detail said men to the service of the Association for so much of their time during the coming year as is consistent with the convenience of the companies involved."

It was moved by Mr. Park and seconded by Mr. Kincaid,

that the President and Executive Secretary be instructed to carry out the provisions of the resolution, with full power to act.

The following resolution, introduced by Mr. Kendall Weisiger at the business session during the Buffalo convention, was presented by the Executive Secretary, and upon motion was referred to the chairman of the committee on Local Chapters:

"At the general meeting of the Pittsburgh Chapter, May 22d last, it was pointed out that the Local Chapters could do the Association a great service if the Sections and the Chapters were officially connected with the standing committees of the Association—if the standing committees of each Local Chapter had some official connection—and the Local Chapters could render great service to the Association in the distribution of questionnaires and in the collection of data, looking, of course, to the consummation of the problems that are placed upon the Association in each year's work."

Services of Our Association at the Disposal of the Government

An acknowledgment of the message forwarded to President Wilson during the Buffalo convention was received from Mr. W. E. Gifford, Director of the Council of National Defense, to whom the message had been referred by the President. Mr. Gifford wrote: "The Council deeply appreciates your offer of assistance and assures you that it will avail itself thereof should the occasion arise."

A letter from Dr. Paul Kreuzpointner was, upon motion of Mr. Dooley, seconded by Mr. Kincaid, referred to the Committee on Co-operation with Other Organizations.

The proposition suggested by Mr. A. J. Beatty of publishing a manuscript he has prepared in the form of a report was, upon motion, referred to the Committee on Publications, with instructions to review the manuscript and advise the Executive Committee regarding the matter at its next meeting.

President Dietz submitted a list of committee appointments, which were discussed and approved. Upon motion the President was given authority to fill vacancies on the committees.

The Program Committee presented a report in which it defined the specific problems that each committee is to undertake during the coming year or prior to the Chicago convention. Rearrangement of committees has been made by the Program Committee with the object of reducing duplication of work and bringing the Association's problems into a more harmonious

relation. Upon motion the new plan was approved, also the Program Committee's report.

The Executive Committee then adjourned to meet in New York at 2 P. M., Tuesday, September 4th, unless previously called together by the President.

COMMITTEES OF THE EXECUTIVE COMMITTEE

List of Committees Appointed by President Dietz and Confirmed by the Executive Committee on July 10, 1917; also a Tabulation of their Specific Duties Prior to the Chicago Convention as Recommended by the Program Committee and Approved by the Executive Committee.

These committees are made up of members of the Executive Committee and will not make formal reports to the annual convention.

Program

F. C. Henderschott, Chairman, The New York Edison Company, New York, N. Y.

J. H. Yoder, The Pennsylvania Railroad Company, Altoona, Pa.

C. R. Dooley, Westinghouse Electric & Mfg. Company, Pittsburgh Pa.

DUTIES: To plan the work assignments of committees and the convention program.

Publications

E. J. Mehren, Chairman, McGraw-Hill Publishing Company, New York, N. Y.

Dr. Lee Galloway, New York University, New York, N. Y.

F. C. Henderschott, The New York Edison Company, New York, N. Y.

DUTIES: To supervise the Association's publications.

Membership

W. W. Kincaid, Chairman, The Spirella Company, Niagara Falls, N. Y.

Mont H. Wright, John B. Stetson Company, Philadelphia, Pa.

L. L. Park, American Locomotive Company, Schenectady, N. Y.

DUTIES: To be responsible for getting new members; to investigate the loss of old members.

Co-operation with Other Organizations

Dr. H. M. Rowe, Chairman, The H. M. Rowe Company, Baltimore, Md.

K. W. Waterson, American Telephone & Telegraph Company, New York, N. Y.

G. N. VanDerhoef,, Dodge Manufacturing Company, New York, N. Y.

DUTIES: To be responsible for co-operation with other organizations.

Training Educational Directors

C. R. Dooley, Chairman, Westinghouse Electric & Mfg. Company, East Pittsburgh, Pa.

Dr. Lee Galloway, New York University, New York, N. Y.

F. C. Henderschott, The New York Edison Company, New York, N. Y.

DUTIES: To supervise the experimental course arranged with New York University for training educational directors and instructors with a view to developing similar plans at other educational institutions.

COMMITTEES OF THE ASSOCIATION

These committees are appointed from the membership and will make reports to the annual convention to be held in Chicago, June 4, 5, 6 and 7.

Nominating

John McLeod, Chairman, Carnegie Steel Company, Pittsburgh, Pa.

W. A. Caperton, Eli Lilly & Co., Indianapolis, Ind.

N. F. Dougherty, The Pennsylvania Railroad Company, Philadelphia, Pa.

E. E. Sheldon, R. R. Donnelley & Sons Company, Chicago, Ill.

Kendall Weisiger, Southern Bell Telephone & Telegraph Company, Atlanta, Ga.

DUTIES: To nominate candidates for the offices and executive committee, as required by the constitution.

Organization and Administration

Charles R. Hook, Chairman, The American Rolling Mill Company, Middletown, Ohio.

F. W. Ellsworth, Guaranty Trust Company of New York, New York, N. Y.

G. A. Ranney, International Harvester Company of New Jersey, Chicago, Ill.

Ben S. Read, Southwestern Bell Telephone System, St. Louis, Mo.

William R. Heath, Larkin Company, Buffalo, N. Y.

Dr. H. J. Tily, Strawbridge & Clothier, Philadelphia, Pa.

E. M. Hopkins, Dartmouth College, Hanover, N. H.

DUTIES: To determine the best methods of organization of educational work as a function of management in typical instances.

Methods of Instruction

J. K. Brugler, Chairman, Western Union Telegraph Company, New York, N. Y.

A. J. Beatty, Carnegie Institute of Technology, Pittsburgh, Pa.

Dr. C. H. Johnston, University of Illinois, Urbana, Ill.

Fred W. Tasney, The Prudential Insurance Company of America, Newark, N. J.

Paul Super, International Committee, Y. M. C. A., New York, N. Y.

John C. Lynch, The Bell Telephone Company of Pennsylvania, Philadelphia, Pa.

DUTIES: To further determine the application of the laboratory, library and inspection trip methods.

Public Education

Myron J. Jones, General Chairman, The Sherwin-Williams Company, Cleveland, Ohio.

Section I—Elementary and Secondary Schools—W. L. Chandler, Chairman, Dodge Manufacturing Company, Mishawaka, Ind.

Miss E. A. Busch, High School of Commerce, New York, N. Y.

E. G. Allen, Cass Technical High School, Detroit, Mich.

W. S. Bigelow, Public Education Association, Buffalo, N. Y.

A. L. Rohrer, General Electric Company, Schenectady, N. Y.

C. B. Robertson, University of Pittsburgh, Pittsburgh, Pa.

Robert B. Bonney, The Mountain States Telephone & Telegraph Company, Denver, Colo.

DUTIES: To determine ways by which member companies can best co-operate with these schools.

Section II—Continuation Schools—Dr. Paul Kreuzpointner, Chairman, The Pennsylvania Railroad Company, Altoona, Pa.

Fred A. Geier, The Cincinnati Milling Machine Company, Cincinnati, Ohio.

R. L. Cooley, Continuation Schools, Milwaukee, Wis.

J. W. L. Hale, Massachusetts Board of Education, Boston, Mass.

Walter B. Russell, Franklin Union, Boston, Mass.

George D. Halsey, Atlanta Public Schools, Atlanta, Ga.

H. V. R. Scheel, Brighton Mills, Passaic, N. J.

DUTIES: To report on the application of the Smith-Hughes Vocational Educational Law.

Health Education

Sydney W. Ashe, Chairman, General Electric Company, Pittsfield, Mass.

Dr. F. L. Hoffman, Prudential Life Insurance Company, Newark, N. J.

Dr. C. A. Lauffer, Westinghouse Electric & Mfg. Company, East Pittsburgh, Pa.

H. Heinz, H. J. Heinz Company, Pittsburgh, Pa.

P. W. Turner, Eastman Kodak Company of New Jersey, Rochester, N. Y.

J. C. Robinson, The New York Edison Company, New York, N. Y.

W. W. Kincaid, The Spirella Company, Niagara Falls, N. Y.

Cecil G. Rice, Pittsburgh Railways Company, Pittsburgh, Pa.

DUTIES: To suggest methods of improving the health of employes.

Employment

F. P. Pitzer, General Chairman, The Equitable Life Assurance Society, New York, N. Y.

Section I—Employes Selection and Job Analysis—A. C. Vinal, Chairman, American Telephone & Telegraph Company, New York, N. Y.

H. A. Hopf, Phoenix Mutual Life Insurance Company, Hartford, Conn.

F. C. Brodhead, The Curtis Publishing Company, Philadelphia, Pa.

Dr. H. C. Metcalf, Tufts College, Tufts College, Mass.

Charles R. Sturdevant, American Steel & Wire Company, Worcester, Mass.

F. E. Weakly, Montgomery Ward & Co., Chicago, Ill.

C. S. Carney, Western Electric Company, Inc., Chicago, Ill.

D. C. Hoopingarner, National Bank of Commerce in New York, New York, N. Y.

DUTIES: (a) To determine how typical clerical and mechanical jobs can be analyzed as an aid in determining the kind of employe desired; (b) how employes' fitness for particular typical jobs can be determined by tests; (c) to determine records and organization necessary to best handle promotions and transfers.

Section II—Labor Turnover—E. H. Fish, Chairman, Norton Company, Worcester, Mass.

Philip J. Reilly, Dennison Manufacturing Company, Framingham, Mass.

H. G. Kobick, Commonwealth Edison Company, Chicago, Ill.

Capt. James A. Freed, Carnegie Steel Company, Pittsburgh, Pa.

Miss K. A. Huey, Bell Telephone Company of Pennsylvania, Philadelphia, Pa.

J. A. Conover, Public Service Corporation of New Jersey, Newark, N. J.

E. W. Gressle, The Warner & Swasey Company, Cleveland, Ohio.

DUTIES: (a) To determine the best methods of calculating turnover; (b) to determine that per cent. of turnover under typical conditions which can be accepted as normal.

Marketing

Dr. Lee Galloway, General Chairman, New York University, New York, N. Y.

Section I—Advertising, Selling and Distribution—Dr. Lee Galloway, Chairman.

W. A. Caperton, Eli Lilly & Co., Indianapolis, Ind.

Prof. M. T. Copeland, Harvard Business School, Cambridge, Mass.

J. D. Gill, The Atlantic Refining Company, Philadelphia, Pa.

R. B. Harvey, Westinghouse Electric & Mfg. Company, East Pittsburgh, Pa.

N. A. Hawkins, Ford Motor Company, Detroit, Mich.

H. G. Carnell, National Cash Register Company, Dayton, Ohio.

DUTIES: To ascertain what organized training is desirable for those engaged in foreign trade.

Section II—Retail Salesmanship—Miss Harriet R. Fox, Chairman, Strawbridge & Clothier, Philadelphia, Pa.

W. A. Hawkins, Jordon Marsh Company, Boston, Mass.

James W. Fisk, Business Training Corporation, New York, N. Y.

Miss Beulah Kennard, 23 Park Avenue, New York, N. Y.

Miss Mary La Dame, Carnegie Institute of Technology, Pittsburgh, Pa.

DUTIES: To determine how to teach a knowledge of mer-

chandise and its uses as a basis of training for better service in retail selling.

Office Work Training

- R. H. Puffer, Chairman, Larkin Company, Buffalo, N. Y.
J. William Schulze, Robert H. Ingersoll & Brother, New York, N. Y.
E. L. Ward, Swift & Co., Chicago, Ill.
L. A. Miller, Willys-Overland Company, Toledo, Ohio.
Miss S. E. Wallace, Guaranty Trust Company of New York, New York, N. Y.
D. S. Curtis, Yawman & Erbe Manufacturing Company, Rochester, N. Y.

DUTIES: To determine under what conditions is organized training for office boys, clerks and stenographers advisable.

Technical and Executive Training

- Kendall Weisiger, General Chairman, Southern Bell Telephone & Telegraph Company, Atlanta, Ga.
Section I—Technical—W. M. Skiff, Chairman, General Electric Company, Cleveland, Ohio.
Fred R. Jenkins, Commonwealth Edison Company, Chicago, Ill.
A. B. Benedict, Goodman Manufacturing Company, Chicago, Ill.
Philip Brasher, Winchester Repeating Arms Company, New Haven, Conn.

DUTIES: To determine what ways can employers of technical graduates co-operate with technical schools.

- Section II—Executive*—Norman Collyer, Chairman, Southern Pacific Company, San Francisco, Cal.
D. R. Stevens, The Goodyear Tire & Rubber Company, Akron, Ohio.
C. E. Bilton, The Bilton Machine Tool Company, Bridgeport, Conn.
C. C. Curtis, Chicago Telephone Company, Chicago, Ill.
W. H. Rogers, Pittsburgh Iron & Steel Foundries Company, Pittsburgh, Pa.

DUTIES: To suggest methods of promotion and training of minor executive in handling men and carrying out company policies.

Trade Apprenticeship

- F. W. Thomas, General Chairman, The Atchison, Topeka & Santa Fé Railway System, Topeka, Kan.
Section I—Railroads—Thomas G. Gray, Chairman, Southern Pacific Company, Sacramento, Cal.

J. H. Yoder, The Pennsylvania Railroad Company, Altoona, Pa.
L. E. Abbott, Oregon Short Line Railroad, Salt Lake City, Utah.
G. M. Basford, Locomotive Feed Water Heater Company, New York, N. Y.

L. L. Park, American Locomotive Company, Schenectady, N. Y.

DUTIES: To determine what supervision of work is desirable for other than machinist apprentices in railroad shops.

Section II—Manufacturing—J. J. Garvey, Chairman, Western Electric Company, Inc., Chicago, Ill.

E. E. Sheldon, R. R. Donnelley & Sons Company, Chicago, Ill.
Paul V. Farnsworth, Cadillac Motor Car Company, Detroit, Mich.

Kenneth W. Reed, Warner & Swasey Company, Cleveland, Ohio.
R. E. vom Yehn, The Singer Manufacturing Company, Elizabethport, N. J.

DUTIES: To ascertain under what conditions is an apprentice instruction shop desirable in a manufacturing plant.

Section III—Steel—P. E. Wakefield, Chairman, Carnegie Steel Company, Duquesne, Pa.

E. S. Cobaugh, Midvale Steel Company, Philadelphia, Pa.
L. W. George, Commonwealth Steel Company, Granite City, Ill.
C. E. Ralston, Jones & Laughlin Steel Company, Pittsburgh, Pa.

DUTIES: To ascertain what supervision of shop work is desirable for apprentices in steel mills.

Unskilled and Semi-skilled Labor

J. E. Banks, General Chairman, American Bridge Company, Ambridge, Pa.

Section I—Unskilled—H. T. Waller, Chairman, The B. F. Goodrich Company, Akron, Ohio.

L. O. Atherton, The Graton & Knight Manufacturing Company, Worcester, Mass.

E. E. Marquis, Ford Motor Company, Detroit, Mich.

G. Guy Via, Newport News Shipbuilding Company, Newport News, Va.

R. J. Young, Illinois Steel Company, Chicago, Ill.

DUTIES: (a) To determine best plans for Americanizing the foreign born; (b) recommend standard educational program for American (including negroes) unskilled workmen; (c) to determine best methods of teaching English to the foreign born.

Section II—Semi-skilled—Carl S. Coler, Chairman, Westinghouse Electric & Mfg. Company, East Pittsburgh, Pa.

J. M. Larkin, Fore River Shipbuilding Corporation, Quincy, Mass.

H. S. Craigmile, The Goodyear Tire & Rubber Company, Akron, Ohio.

Miss Gilson, The Joseph & Feiss Company, Cleveland, Ohio.

Mr. O. C. Short, Thomas Maddock's Sons Company, Trenton, N. J.

DUTIES: To determine best methods of instruction to bring operators up to standard rates on specific tasks.

LOCAL CHAPTERS

John McLeod, Chairman, Carnegie Steel Company, Pittsburgh, Pa.

C. R. Dooley, Secretary, Westinghouse Electric & Mfg. Company, East Pittsburgh, Pa.

Members: Chairmen of Local Chapters (as new chapters are organized their chairmen become members of the committee).

DUTIES: (a) To be responsible for the relations with the Association's Local Chapters; (b) to supervise the organization of groups of members into local chapters; (c) to be responsible for the furthering of the Association's interests through the Local Chapters.

WORK FOR SCHOOLS AND COLLEGES

Education is rapidly recovering from shell shock, and the first impulse to close schools and universities in a spirit of patriotism is giving way to the feeling that to keep them open is a work of national importance, says the *Springfield Republican*. Northwestern University sends out a bulletin expressly to deny a rumor that it would suspend sessions next fall or winter, and takes occasion to refute the fallacy that university work is not so important in war time: "This is a dangerous notion; the very contrary is the truth." It declares that the ranks of the universities must be kept filled, and in the same spirit the Yale university emergency council not long ago strongly recommended the younger men not to leave college now nor to join anything which would prevent their returning next fall: "Let students go on with their school course and with their regular college and professional work, specially if the latter be in such departments as medicine, chemistry, or engineering, where the demand for thoroughly trained men is pressing and sure to continue."

NEWS ITEMS ABOUT OUR MEMBERS

Henry Ford's Two Objects in Life—An Interesting Interview with Mr. Ford and How He Explains His Success—Also Some Comments on the Bonus Wage Plan by Dean Marquis, of the Educational Department, at the Buffalo Convention—A List of Committee Reports Remaining in the Office of the Executive Secretary Which May be Had by Members for the Asking—General Electric Company Graduates a Class of Twenty-six Industrial Workers—Henry M. Leland and His Son Withdraw from the Cadillac Motor Car Company to Devote Their Time to the Solution of War Problems.

The editor of the BULLETIN again requests our members to forward items of news regarding "employe relation's" developments of their companies which would be of interest and helpful to other members. Considerable news items have been received during the past few months and published in the BULLETIN, but the habit of sending such news has not yet been fully formed. In the fall there will be many changes, improvements and new developments which will be of interest to all of our readers. Our members are earnestly requested to forward such items to the BULLETIN for publication.

Interesting Facts About Mr. Ford and His Company

In the course of a speech in Congress on taxation of industrial concerns Congressman Benjamin K. Focht of Pennsylvania recalled recently the astonishing financial success of the Ford Motor Company, based upon its last annual statement and upon interviews with Henry Ford and other members of the establishment. He observed that the company made a profit of \$59,994,118.01 for the year ended July 31, 1916, but pointed out that this profit was made on a sale price 15 per cent. greater than the price of the Ford car for the current year. He added:

"Most of the profits earned by the Ford Motor Company goes back into the business to create more jobs for another army of men.

"Forty-nine thousand eight hundred and seventy are employed; 36,626 of them on the company's profit-sharing basis, receiving \$5 a day or more."

WAGES MUST ELIMINATE FINANCIAL WORRIES

He quoted Henry Ford as follows:

"If you expect a man to give you his time and energy, you must fix his wages so he will have no financial worries. It pays. Our profits this year, after giving our employees a big share in them, show that to pay good wages is the most profitable way to do business."

Mr. Focht asserted that after a three-hour talk with Mr. Ford he had gone away with the conclusion that the manufacturer has two great objects in life, which he believed to be:

"To give employment to the greatest possible army of men in works of peace at the highest wages paid in the world, so they may live in comfort and peace; and to do all in his power to induce the military armies of the world to stop killing each other and bringing suffering on themselves and those dependent on them.

"The bigger our business gets, the easier it is to run," said Mr. Ford.

"If a man can show the company how to save ten cents on a car, it means a saving of over \$50,000 a year to the company and places the man where he will not have to worry the rest of his life. Suggestions for improvements on the car are valued as highly as suggestions for saving money."

DOING GOOD ENABLES ONE TO DO MORE

"The recompense for doing good is the fact that you are able to do more," declared Henry Ford, in reviewing the statement of the year's business.

"We have had a wonderful year and it will enable us to give employment to a steadily increasing number of men. It's our reward for treating our men right and for sharing our profits with them.

"When we announced our profit-sharing plan there were hundreds of manufacturers who said it couldn't be done. They declared it wouldn't work. They assailed it from all angles. Our statement shows whether it has worked or not. It shows that we have made a profit of about \$60,000,000 and at the same time have paid our men the very highest industrial wages.

"About 74 per cent. of our workers enjoy the advantages of the plan. The remainder are mostly beginners who work on fixed rates according to skill and who receive the benefits of the advanced rate after the expiration of six months.

SOME FAULTS OF TECHNICAL SCHOOLS

"The trouble with most manual training schools or technical schools," said Mr. Ford, in discussing his plan for a boys' training school at his plant, "is that the boy never gets into the heart of his work, because he knows that in the end it is not used. The products of his hands have no real market value after they are finished; the boy knows it, and consequently he loses the most valuable part of the lesson.

"I want to take these boys, teach them to make small parts, instruct them in the operation of machines, and while doing it give them a sense of responsibility by utilizing their product. I want them to be able to see a definite purpose in their labor.

"They cannot, of course, do heavy work. But there are numberless operations which they are capable of performing that will give them skill and fit them for jobs which will bring them the wages of an artisan.

"We do not intend to overlook their school work. Some of them will probably need to be taught to read and write and spell. Wherever we find that this is necessary we will give them such a course. Those who are ready will be given courses in mathematics and drawing, specially chosen with the idea of assisting them in their work.

"I hope," said Mr. Ford, "that the future heads of our departments may come from this school. We like to develop our own stars, you know. We have found it is the only successful way. We promote men from the ranks."

Enormous Labor Turnover

In discussing employment problems at the Buffalo convention, Dean S. S. Marquis, of the Education Department of the Ford Motor Company, said:

"It was back in 1913 that the Ford Motor Company became convinced that the problem of the turnover was one of the greatest with which it had to cope. It had spent a vast amount of energy and money to perfect its organization and to increase its efficiency. Having done this it found that there was still something radically wrong. There was a tremendous waste that ought to be going into somebody's pocket, and that waste was due to an enormous turnover. This turnover was, perhaps, not any larger in proportion to the number of men employed than that which is to be found in many other shops, but because the company was employing so many men the turn-

over seemed unusually large. In fact, I understand that in the city of Detroit today there are automobile factories in which the turnover is relatively almost as large as that of the Ford Motor Company in 1913.

"In 1913 the company was working a force of about 14,000 men. In order to keep this force level it was necessary to hire 52,445 men. During the year 50,448 men left the employ of the company for one reason and another. It is estimated that the cost of hiring and fitting a man to his job is around \$70, so that the loss through turnover was, as has been said, very great.

CAUSES OF ABNORMAL TURNOVER

"After making a careful investigation the company decided that the chief causes of the turnover in labor were long hours, low wages and wrong home conditions. It decided to see what could be done toward removing these causes of unrest and dissatisfaction. It went straight to the root of the trouble and reduced the hours of labor, increased the wages, and organized a department to look after the welfare of its employees and to improve the conditions under which its people were living and working.

"The company did another thing, which, perhaps more than any other one thing, had a tendency to reduce the turnover.

"Down until the time of which I speak the matter of hiring and discharging men was largely in the hands of superintendents and foremen. This power was taken away and placed in the hands of two or three men. The result was that whereas there were more than 8,000 men discharged in 1913 by superintendents and foremen, one year after the new order went into effect only twenty-seven men were discharged out of a force of about 20,000.

"When a man is hired he is taken largely at his own estimation as to his skill. He tells you that he is familiar with the operation of a certain machine. You hire him and place him on the machine with which he claims familiarity, and you find he knows little or nothing about it. He told you what was not true in order to get a job. Under the old order such a man was discharged instantly. Under the new order, in which it is maintained that it is cheaper to 'fit' a man than to 'fire' him, the man is transferred to some other job. He may be tried out in a number of places in the department to which he is first assigned, and if he cannot be fitted to a job there, the superintendent sends him back to the employment office, and there he will be sent into some other department.

"The reduction in turnover due to these measures was from about 300 per cent. to about 18 per cent. The turnover for the entire period from January 12, 1914, to November 1, 1916—thirty-four months—was 11,700, and the force employed during this time was ranging from 18,000 to 40,000.

"The results, briefly, were better shop conditions, improved home conditions, a more efficient, better satisfied and steadier working force."

Henry M. Leland Withdraws From Cadillac Motor Car Company

Henry M. Leland, founder of the Cadillac Motor Car Company of Detroit and charter member of our Association, recently announced that he and his son, Wilfred C., have withdrawn from the automobile business to devote their time to the solution of war problems. Henry Leland has long been known as a student of aviation.

The Lelands, father and son, achieved worldwide renown for their success in the development of gasoline engines. Henry Leland used a one-cylinder engine in the first automobile he built. He and his son, collaborating with other experts, then turned out two-, four-, and eight-cylinder engines.

General Electric Company, Erie Works, Graduates Its Apprentice Class

The General Electric Company on June 30th gave a complimentary dinner to graduates' alumni and the honor committee of their apprentice department at the Hotel Lawrence, Erie, Pa.

Professor James F. Barker, of the National Society for Industrial Education, president of the Mechanics' Institute, of Rochester, N. Y., was the principal speaker. The welcome was extended by Matthew Griswold, works manager of the Erie plant, who presented statistics of the local plant.

J. D. Dennis gave figures concerning the apprentice department, showing the value of the organization, and H. Lemp presented honor medals to those who had won them in the class. N. E. Brown, chairman of the honor committee, responded.

W. C. Jordan, patternmaker graduate, A. William Wenerstrom, C. E. Mathews, and Professor I. B. Bush, superintendent of city schools, were the other speakers. Superintendent Bush spoke on education in general and particularly of the G. E. junior apprentice school.

Graduate apprentices, in whose honor the dinner was given, were:

Machinists and toolmakers—Elmer Kohlmler, O. H. Carlson, Albert William Wennerstrom, William W. Knight, William Lee Curtis, L. D. Glenn, Theodore Katt, Rudolphe Lohse, David L. Swanson, Alvin D. Pratt, John Reich.

Wood and metal patternmakers—Alfred E. Detzel, Robert Machany, Cecil Talling, Victor E. Larson, John C. Stern, C. E. Mathews, W. C. Jordan, Roy Avril, Emory W. Lang, John A. Bucklin, R. C. Larsen.

Moulders—Carl A. Palmquist, Joe A. Zuzula.

Electrical testers—Jergen H. Jakobsen.

Draughtsmen and designers—Charles Carney.

Committee Reports Available to Our Members

There is on hand in the office of the Executive Secretary committee reports, as enumerated below, which may be had by any of our members upon request and without expense. The Executive Secretary's office is not in position to supply reports other than those listed below:

1915 REPORTS

Employment Plans Committee, 25; Vocational Guidance, 10; Allied Institutions, 61; Public Education, 42; Safety, Hygiene and Co-operation, 52; Special Apprenticeship Schools, 41; Accounting and Office Work Schools, 8; Advertising, Selling and Distribution, 2; Trade Apprenticeship Schools, 40.

1916 REPORTS

Codification Committee, 292; Office Work Schools, 67; Safety and Health, 128; Special Training, 58; Advertising, Selling and Distribution, 102; Allied Institutions, 50; Unskilled Labor, 40; Public Education, 32; Retail Salesmanship, 100; Trade Apprenticeship Schools, 65.

1917 REPORTS

Public Education, 100; Employment Plans, 32; Administration and Supervision of Corporation Educational Work, 88; Safety and Health, 44; Allied Institutions, 225; Local Chapters, 88; Educational Methods in Corporation Schools, 118; Trade Apprenticeship Schools, 19; Retail Salesmanship, 80; Office Work Schools, 65; Special Training Schools, 17; Unskilled Labor, 52; Corporation Continuation Schools, 90; Advertising, Selling and Distribution Schools, 94; Special Report on Profit Sharing, 85.

NEW BOOKS WHICH MAY INTEREST OUR MEMBERS

"The Journal of Applied Psychology," by G. Stanley Hall, John Wallace Baird, L. R. Geissler and a Board of Co-operating Editors. Published by Florence Chandler, 950 Main Street, Worcester, Mass. Issued quarterly. Price, \$4.00 the year.

This publication promises to be most helpful to the membership of our Association. The scope of the publication includes:

First—The application of psychology to vocational activities, such as law, art, public speaking, industrial and commercial work, and problems of business appeal.

Second—Studies of individual mentalities, such as types of character, special talents, genius and individual differences, including the problems of mental diagnosis and vocational prognosis.

Third—The influence of general environmental conditions, such as climate, weather, humidity, temperature; also such conditions as nutrition, fatigue, etc.

Fourth—The psychology of everyday activities, such as reading, writing, speaking, singing, playing games or musical instruments, sports, etc.

Two issues of the publication have appeared. They are rich in content and hopeful in promise.

The editor suggests that a subscription to this periodical will prove four dollars well invested. Psychology is more and more to play an important part in the solution of the problems involved in employe relations in industry.

"How to Choose the Right Vocation," by Holmes W. Merton. Published by the Funk & Wagnalls Company, New York. Price, \$1.50.

With the aroused interest in the subject of placing individuals in industries where they will have opportunity of realizing the major degree of success, it is inevitable that a number of books should appear dealing with this problem.

The author has attempted to write a book which will be helpful to the individual who has not the advantage of expert personal counsel. The book is filled with facts and figures, some of which are verified and some of which are theory. It is, however, a helpful book and should be in the library of every employment manager and every director of industrial educational courses.

"Locomotive Valves and Valve Gears," by Jacob H. Yoder and George B. Wharen. Published by the D. Van Nostrand Company, New York.

Mr. Yoder is the Class "A" representative of the Pennsylvania Railroad Company in our Association. He is also Supervisor of Apprentices of that company. In preparing the book the authors have been materially assisted by other competent authorities in the subject upon which they have written. The book is technical, but intended not as a technical treatise, but rather as a practical reference book of valuable information applicable to the everyday work of the average mechanic employe in railway shops.

For the apprentice learning a trade it furnished information on valves and valve gears that can otherwise be obtained only by laborious work and considerable reading of books not bearing directly on this subject. The book will serve the engineer or fireman desiring to broaden his knowledge of the principles of this subject. Written primarily for the shopman, it contains much information of interest to the draftsman and the designing engineer engaged in locomotive work.

"A Printer's Arithmetic," compiled by Charles L. Woodfield, Director of the Chicago Typothetæ School of Printing.

The publishing and printing interests are fairly well represented in our Association. This book will be of most value to these interests. It should be in the office of every printer. Copies can be secured direct from Mr. Woodfield, Room 833, 536 South Clark Street, Chicago, but the price of the book is not given.

NEW MEMBERS

Since the last statement appeared in the BULLETIN the following new members have been received:

Class "B"

E. E. Sheldon—R. R. Donnelley & Sons Company, Chicago, Ill.

Class "C"

E. O. Griffenhagen—Arthur Young & Company, Chicago, Ill.
Chamber of Commerce of Mount Vernon, Mount Vernon, N. Y.

The ignoramus is fettered with a hundred delusions.—
FRANK CRANE.

Extraordinary Congress on Safety

The National Safety Council will hold an extraordinary congress in New York at the Grand Central Palace early in September. At the same time the American Museum of Safety will hold the largest exhibition on safety and sanitation devices ever exhibited. This combined exhibition will be open to the public for one week.

W. H. Cameron, General Manager of the National Safety Council, in speaking of the forthcoming congress, said:

"The keynote of the sessions at the congress will reflect its one object—so to educate employers of labor throughout the country that their attitude toward the conservation of workmen may become thoroughly receptive, and that through concerted efforts the safety movement during the war will receive an impetus as never before. Men of national repute will put before the managers and superintendents of the various industries salient facts as to the vital importance of man-power conservation and incidence upon a speedy and successful termination of the war."

Extending the Gary System in New York

After a long and strenuous contest, advocates of the Gary System of Education in the public schools have won out in New York. Over a million and a half dollars has been appropriated by the Board of Estimate for the purpose of extending the system in the schools of that city.

Continuation Classes for Industrial Employees

The Board of Education of New York has established several additional continuation classes among the industrial institutions of that city. One of these classes will be conducted in the Brooklyn Navy Yard. Continuation classes in industrial institutions are becoming an important factor in the industrial system of our country.

TABLOID EDITORIALS

ADDRESSING THE HIGH SCHOOL STUDENTS in New Haven, Conn., E. W. Weaver, of the Boys' High School of Brooklyn, declared the greatest economic waste of this country is the undeveloped natural resources of humankind. "If every boy and girl were properly trained for their life's work, it would increase the country's assets by billions of dollars."

THE PROGRESS OF THE WORLD

In 1837, less than eighty years ago, S. F. B. Morse secured a patent from the United States Government for sending messages by electricity. Few believed in its worth and the inventor struggled on in poverty for years. Six years later he asked Congress to appropriate \$30,000 for a telegraph line between Washington and Baltimore, a distance of forty miles. There was bitter opposition to the bill one member of Congress remarking during the debate that "a railroad to the moon would be as reasonable." The struggle continued until midnight on the last day of the session of Congress before the bill was finally carried and became a law.

Professor Morse sent the first message, which read, "What hath God wrought?" and a little later in his office at the Capitol at Washington Morse received the tidings of the convention at Baltimore and the news of the nomination of Polk for the Presidency. Said one who was present on that occasion, "This talking with Baltimore was something so novel, so strange and so extraordinary and upon a matter of such interest that we could hardly realize the fact. It seemed like enchantment or a delusion or a dream." Yet this was only eighty years ago.

Since that time not only has the telegraph system crossed the lands and passed under the oceans girdling the earth but the telephone system has kept pace in progress and today we are not astonished to learn that a man stationed at Fort Meyer, near Washington, should talk, without the use of wires, with another man stationed on Eiffel Tower in Paris. Indeed, "What hath God wrought?"

The great electric operating stations of this country and the world, the use of electricity in healing diseases, in the economics of the home, in fact, in almost every walk of life, have all been wrought in less than a century. The development of electricity is only one of the many developments of great importance which have occurred during the past century. The development most vitally needed at the present time is for a bigger and better educational system through which the youths of today and tomorrow may be advised, instructed and prepared for their life's work.

PROGRESS OF OUR PUBLIC SCHOOLS

By AMBROSE L. SUHRIE, University of Pennsylvania

The feeling is not uncommon among large numbers of our people in city and in country—that the state's obligation has

been fully discharged when the mere rudiments of an education have been provided at public expense. As a result, adequate educational facilities above the elementary school grades are provided with certainty only where the majority of the people are aware of the educational possibilities of the golden period of adolescence. And even in such communities the equipment of the high school plant usually makes no adequate provision for all the work of a many-sided curriculum. There are still large areas, including whole states, where free secondary education is within reach of only a very small fraction of the boys and girls that are eligible. At a time when intelligent men and women everywhere agree that the free education of all normal young people should continue well through the period of adolescence, it is surely a violation of every principle of sound democracy to deny high school advantages to any adolescent merely because of untoward circumstances over which as an individual he can have no control. Unhappily, too, these advantages are most frequently denied to the alert and ambitious boys and girls of the rural districts where it would seem the nation is just now in most urgent need of capable leadership.

It is most gratifying, however, to note the achievements of the past two decades in the rapid extension of high schools. Up to the year 1900 there were scarcely a dozen public institutions in all of the South which by the best standards of the times could be called high schools. These were exclusively in the large cities. Today almost a thousand high grade public secondary schools exist in that section alone and the progress elsewhere has been almost equally noteworthy. A single small county in Indiana has built fifteen magnificent rural high schools during the past eight years. The outlook for the immediate future is bright. The recent rapid growth of permanent state school funds and the practice of apportioning large grants of money for the aid and encouragement of the smaller high schools will in the near future—unless all signs fail—bring secondary education, certainly in all our more thickly populated states, within reach of all who really desire its benefits.

Heavy Summer Enrollment at Detroit

The enrollment in the public schools of Detroit is so great this summer that it taxes the capacity of the school buildings. The increase is more than 50 per cent. over last year.

A PLAN TO COMPLETE OUR EDUCATIONAL SYSTEM

A Larger Degree of Industrial Education Necessary to Make Training in the United States Less Top-heavy

(Bridgeport, Conn., *Telegram*)

Many of the leading educators of today, men and women who have given deep thought and study to the educational problem, are convinced that our present educational system is top-heavy, that it does not offer sufficient facilities for the efficient education of the great mass of boys and girls of today who will be men and women of tomorrow.

Under the existing educational conditions in this country, too much time and money is devoted to the higher education of the few and too little time and money to the education in the practical ways of life of the many. In round numbers there are 30,000,000 children in this country between the ages of 6 and 20 years, inclusive, of which number about 50 per cent. reside in the country and 50 per cent. in our cities and villages.

It is stated that 85 per cent. of the children of the country leave school before they reach 16 years of age; that not over 8 per cent. of the school boys and girls ever go through high school, and that only about 3 per cent. of those who graduate from high school go on to the higher schools and colleges. More than a million of the boys and girls of our country are added each year to the army of industrial workers of the land, most of them without practical preparation for life's battle of the industrial doers upon whom our future as a nation largely depends.

Our educational system today is too theoretical, not enough practical; too extensive, not enough intensive. The training that the large majority of the boys and girls receive is not of the character to prepare them for the practical work of life.

Unfortunately, our educational system has been hampered by so-called educational fads. Every little while some ambitious mortal desiring to reform the world offers a new educational theory which is guaranteed to be a panacea for all human ills, and the result is the curriculum of the lower grades has become crowded with a lot of new-fangled, half-baited educational ideas, none of them bearing upon the practical education of the child.

If part of the money being spent today in our higher educational institutions could be diverted to the work of training

our future citizens, the 85 per cent. that never go beyond the high school, much better results would be obtained from the enormous expenditures, over \$600,000,000, in this country every year for educational purposes.

Friends of the industrial educational movement believe that something should be done in the way of training the 85 per cent. of our school population who, under the present conditions, are turned out into the world to begin life's battle handicapped for want of knowledge of what to do, and they hope that the beginning of an educational movement in this country will make it possible for every boy and girl to go out into the world equipped with practical training for life's work.

A country is great when the masses of its citizens are contented and happy. There can be no contentment and happiness among our industrial workers unless there is efficiency, and if we are going to produce in this country an army of efficient workers in all fields of human activity, the cultural side of education, so long emphasized in this country, must claim less attention of the time, in order that the more practical education in the training of how to do may receive its due emphasis.

The feature to which we call your special attention is that provision which seeks to promote the welfare of the boy and girl whose parents are engaged in the industries—whose parents, and especially whose fathers, are everyday laborers. Whether they be blacksmiths, carpenters, masons, machinists, plumbers, barbers, engineers, miners, or otherwise engaged in manual labor, it matters not. It is designed to reach those who are not able to send their sons and daughters to college or the university; those who need the labor of their offspring to help support the family. We are all laborers. Some work more with their heads than they do with their hands, and some work more with their hands than they do with their heads. One is just as honorable as the other.

BOARD FOR VOCATIONAL EDUCATION

President Wilson has appointed the Board for Vocational Education which will have charge of the Government's participation in that work, as provided in the recent bill passed by Congress. The members are: Arthur E. Holder of Iowa, to serve for three years; Charles A. Greathouse of Indiana, two years, and James Phinney Munroe of Massachusetts, one year.

GREAT BRITAIN'S PRESENT EDUCATIONAL SYSTEM

**A Description of England's Present Methods of Learning and
a Statement of Changes Which Must Be Made if that
Country Is to Become Progressive**

Judson C. Welliver, a foreign correspondent of the *New York Sun*, recently forwarded an article dealing with the effect of the war upon the educational system of Great Britain. It is the opinion of Mr. Welliver that one result of the war is going to be the reorganization of the British educational system, though the progress being accomplished in that direction at present is not very reassuring. Nevertheless there is enough discussion of the subject to make it very apparent that interest has taken deep root in the soil that finally will produce returns.

Like everything else in England, the educational system represents the growth of centuries. It represents a rather halting and frequently interrupted tendency to democratize the old system that was based on the conditions of those times when all education and practically all culture was controlled by the Church. The elementary schools are in some cases controlled by the Church of England and in some cases are "board schools," which means real public schools. The board schools are supported in part from local taxation raised in the jurisdiction they serve and in part from national funds apportioned to the local jurisdiction.

The elementary education is rather meagre and attendance, especially of children representing the working classes, is very uncertain. There is going to be a new realization of the importance of compulsory school attendance, and the National Union of Teachers has prepared a plan looking to compulsory attendance and to maintaining a good deal larger educational scheme.

One of the drawbacks to a complete reorganization of the British school system is the fact that their buildings are out of date, but so strongly constructed as to be able to last for some centuries yet.

The best schools are generally the board schools maintained in progressive communities where the liberalization of the democratic movement in politics has been able to make itself felt.

But the writer believes a reform will be easy after the war, if there is not a complete industrial collapse under the burden of debt which the war will impose. If that happens, if the country falls back into a condition of depression and finds itself with a huge unemployment problem on its hands, then educational

reform will have to wait, because there will be no money to carry it out.

On the other hand, if it is possible to keep the people employed after the war and to maintain anything like the higher scale of wages for the great mass of working people that has been established under war conditions, then the great mass of the middle and lower class population is going to be lifted up very rapidly. It will no longer be so necessary, as in the past, to take children of tender ages out of the schools to put them to work in order that they may contribute to the family exchequer.

It would be impossible to overstate the present depth and sincerity of the feeling among all classes of the community in favor of such a commission for the improvement of the masses of the people.

Obligations are Realized

There is a new realization on the part of the wealthy of their obligation to the community as a whole; an enlightened conception of the fact that after all the country belongs to all the people and is not here for the purpose of being exploited by the privileged few who have either inherited it or have been clever enough to possess themselves of its best opportunities.

Very few people suspect that the British Empire can maintain itself in security in the future without persistently and continuously giving a much more intelligent consideration to the needs of all its people than it has ever given in the past.

While the results of German "kultur" have not been popularized in the English mind by the events of the last three years, some German methods, and particularly those concerned with universal education, have come into recognition as explanations of the German increase in power and influence in the world. Great Britain has no present notion of adopting a German scheme of popular education, and whatever it does borrow from the Germans will have to be liberally sugar-coated.

Lack of Uniformity.

But the fact remains that among European countries Germany has somehow developed an efficient scheme of universal education and has demonstrated how much a system will contribute to the national power, both military and economic. So England, while firmly convinced at the moment that nothing German could be desirable, is nevertheless anxious to equip itself with every means that will increase its national power and importance and help to insure a new lease of leadership in the world.

One of the serious weaknesses of the present school system is that altogether too much discretion is lodged in the local authorities as to the extent and character of facilities they will provide, especially for education beyond the elementary stages.

The primary and intermediate schools in many cases are of very fair quality, and in some communities facilities are reasonably ample, though they almost never would be fairly comparable to the equipments provided in American communities. But beyond this it is purely a gamble whether in a given community any serious provision shall have been made for education corresponding to the work of the American high school at public expense.

An American who engages a stenographer in England almost invariably discovers that he or she is the product of some private school, and the private schools make tuition a serious burden on the parents. It is rather exceptional in England to find a young man or woman with sufficient education to be equipped for the duties of a stenographer or office assistant who acquired that education in the public schools; they will usually be found to have been trained in private schools.

Tuition Is Costly

A pupil at the age of 7 or 8 will pay perhaps \$10 for tuition in one of these private schools for a term of twelve weeks, five days in the week. As the age increases the fee rises also, getting up to \$20 or \$25 for the term in the higher grades.

Such charges obviously are prohibitive in a fairly large family. The scheme of the National Union of Teachers proposes to require the school authorities of each local jurisdiction to maintain free schools of satisfactory character roughly corresponding to the American system of high schools; to co-ordinate these with the elementary and intermediate grades, as is done in America; to require compulsory attendance of children up to some age that shall be fixed.

As to this age for compulsory attendance there is a wide difference of opinion, some fixing it at 14, some at 16, some even as high as 18 years. But the necessity for making attendance compulsory is widely realized by the school authorities and by most persons concerned with the educational problem, because so many people would take their children out of school and put them at work unless they were rigorously prohibited from doing so.

While the demand for better public education comes to a

considerable extent from the industrial classes, there are nevertheless multitudes of persons belonging to these classes who have no conception of the value and importance of educating their children properly. One proposal is that attendance shall be compulsory up to the age of 16 for full time school work, and that thereafter part time attendance may be permitted under certain circumstances.

The School of Experience

A man named Brown and a man named Black graduated from high school and entered business in New York at the same time.

Both made rapid progress. At twenty-five each of them was drawing \$2,500 a year.

"Coming men," said their friends. "If they are so far along at twenty-five, where will they be at fifty?"

Black went on. At fifty he is president of his company, with an income of \$25,000 a year.

But something happened to Brown. He never fulfilled the large promise of his youth: at fifty he had hardly advanced beyond his thirty mark.

What was it that happened to these two men, of equal education and—so far as the world could judge—equal ability?

I will tell you.

Brown became satisfied. He ceased to study, which means that he ceased to grow.

Black has told me that when he reached \$5,000 a year he said to himself: "I have made a good start. Nothing can stop me if I keep my health and keep growing. I must study, study, study: I must be the best informed man on our business in the United States."

There is the difference. One stayed in school: one did not.

The position you attain before you are twenty-five years old is of no particular credit to you. You gained that simply on the education your parents gave you—education that cost you no sacrifice.

But the progress you make in the world after twenty-five—that is progress that you must make by educating yourself. It will be in proportion to the amount of study you give to your work in excess of the amount the other man gives.—*Bruce Burton.*

**THE INDIVIDUAL DOES NOT IMPROVE
BECAUSE HE DOES NOT TRAIN**

We stay far below our own possibilities in almost everything that we do. We stay where we do, not because proper practice would not improve us further, but because we do not take the training or because we take it with too little zeal. We remain as incompetent as we are, because we do not care enough about improvements.—*From the book "Education," by Edward L. Thorndike, Professor of Educational Psychology, Columbia University, page 108.*

GOODYEAR COMPANY'S FACTORY SCHOOL METHODS

Six Different Groups of Employees are Now Receiving Instruction Which Includes the Alien and Unskilled Workers

Mr. Craigmile's Report

Mr. H. S. Craigmile, Manager of the Factory School of the Goodyear Tire & Rubber Company, recently forwarded to Mr. J. E. Banks, Chairman of the Committee on Unskilled Labor, a report covering all of the activities of that particular school of the Goodyear Company. Mr. Banks kindly forwarded the report to the BULLETIN after taking from it such information as he desired to use in the report of the Committee on Unskilled Labor to be made at the Fifth Annual Convention at Buffalo. Believing the report will prove of interest to all our members, it is published herewith.

Six different groups of Goodyear employes are now receiving instruction. They are: the aliens, the flying squadron, the engineering department squadron, the apprentices, the general factory class, and the deaf mutes. Any employe of the company may take the school work and is classified in one of these groups.

Alien Classes

In the alien classes are men from every nation of Europe. When they are in the classroom nothing but English is spoken to them. They are given a course forty weeks in length, one hour each day, two days a week, making eighty hours of instruction in English and Citizenship. They are divided into two sections, the beginners and the advanced classes, and are given a diploma for the satisfactory completion of the course. Into the beginning classes come those who speak no English at all. The advanced class is composed of men who have at least a smattering knowledge of the English language when they begin the work. In addition to the instructors we employ a man who speaks ten or a dozen languages and he renders valuable service by circulating through the various departments of the factory and interesting the men in bettering their conditions by coming to school.

Optional or Compulsory Attendance

While no system of compulsory attendance has been inaugurated it is possible that we shall be led to adopt such a plan as the best solution of a very difficult problem. For the present the company pays the alien students their regular shop

rate for the time spent in school on condition, however, that they be able to show perfect attendance during the given month.

The English instruction in these classes is given objectively and dramatically. The instructor acts out each sentence as far as it is possible to do so and a collection of common objects is kept on hand. After each thought has been acted out and its meaning given in English the students go through the same actions and repeat the English until they understand what they are doing and saying though no interpreting work is done. In short they soon begin to think in English by associating spoken and acted ideas.

Flying Squadron Classes

The Flying Squadron is an organization now controlled by the Factory Planning Department. The men composing this group are picked from the various rubber manufacturing departments, and after passing a strict physical examination, in addition to a mental one, are signed up for a three-year course leading to the degree of Master Rubber Worker. These men are given the opportunity to learn the rubber business from the beginning to the end. During the three years the men work in every rubber production department and in addition attend school six hours per week, taking courses in Business English, Arithmetic, Organization and Management, Economics, and Rubber Manufacturing Practice, optional courses being given in Spanish, Mechanical Drawing and Modern Business. Each squadron when organized consists of fifty men and the seventh squadron is now being launched so that the company has in the neighborhood of 300 picked and dependable workmen. The best men from the squadron courses are picked for positions of responsibility. A recent report by the manager of the Labor Department shows that sixty per cent of the thirty-five men who composed the first squadron are now foremen or sub-foremen and that thirty per cent of squadron No. 2, which graduated last year, have now attained similar honors.

Text-books are used for some of the squadron classes, but a good deal of the work is done with mimeographed lesson sheets.

The Engineering Department Squadron

The Engineering Department squadrons are now two in number, and Squadron No. 1 is now about half through the second year of school work. They are handled in practically the same way as the Production squadrons with the exception

that the men are recruited from the machine shops and the engineering departments, and the work given them is of a mechanical nature, embracing Shop Mathematics, Mechanical Drawing and Principles of Mechanics.

The Apprentices

The apprentice classes at present are small for the reason that our shop apprentice system has not been thoroughly worked out. We anticipate large classes in the near future with a carefully prepared system by which the school work and the shop work will be closely correlated. The boys now attending school are taking Mechanical Drawing and Arithmetic on alternate Tuesdays. On the Tuesday that they have Drawing, they have a two-hour period, and on the one they have Arithmetic, a one-hour period.

General Factory Classes

The fifth division is the largest and now numbers about 600 men. Any Goodyear employe is eligible for the General Factory classes, and it is our aim to give instruction in any practical subject for which there is sufficient demand. Since the factory operates on the "continuous production" basis, the men work in three shifts of eight hours each, and as these shifts change at many different times, it is necessary for the school to be in session from 7 A. M. to 11 P. M. five days a week, classes convening throughout this entire period at hours to accommodate the men. Subjects at present taught in these classes are: Business English, Arithmetic, Spanish, Civil Government, Mechanical Drawing, Practical Electricity and the Goodyear Modern Business course. We expect in the near future to open classes in Practical Mechanics, Public Speaking, and Business Law and Corporation Finance.

A point worthy of notice in regard to the General Factory classes is that they are composed of men of all ages ranging from 16 to 56 years, having all degrees of education from fourth or fifth grade in common school to university degrees. The university men, of course, do not take the elementary subjects, but still the widely varying degrees of previous education in the personnel of the classes make it essential that the course be distinctive and practical. For this reason we have found that no one text-book is ever suitable for our courses. Instruction is given by means of mimeographed lesson sheets. Each instructor prepares his lessons for the individual classes following an outline o. k.'d by the school manager. This method has proven very

successful, all matter having no practical value being omitted. This method also admits of reconstructing the courses at any time to meet changing conditions, and in addition, it allows the instructors an opportunity to develop their individual constructive ability.

In the Mechanical Drawing classes all instruments and materials used are furnished by the Goodyear company; each pupil being responsible for the careful use of the instruments. The first exercises are in geometric construction and serve the purpose of familiarizing the students with the use of the tools, the arrangement of views and line conventions. The succeeding plates are so selected and arranged that each presents one or more new principles. The entire course is designed to be as practical as possible and is intended, not primarily to make draftsmen of the men taking the course, but to make them more efficient in the particular line of work in which they are now interested.

The last statement is true of all our school work. No subjects are taught which will not help to make Goodyear men more efficient as Goodyear employes.

There is a large enrollment in the Spanish classes due to the fact that this company has extensive interests in Latin-speaking countries. The method of instruction is almost identical with that used in the alien classes.

Mute Classes

In order to make good the statement that all employes of the company might take advantage of the school work, it was necessary for us to open classes for the deaf mutes, there being about 250 of these men employed here. They are now being given instruction in Business English and Arithmetic, by a graduate of Gallaudet College, Washington, D. C., himself a mute.

Summary

The Goodyear factory school now occupies eleven rooms and an office on the well-lighted top floor of one of the new factory storage buildings, covering approximately 5,000 square feet of floor space. In addition to the usual school equipment, a piano, phonograph and stereopticon have been provided. Eleven instructors are caring for 132 classes each week and the school enrollment is in excess of 800.

Columbus had a good idea, but he didn't get it across without persuasion.—J. O. ARMOUR.

GENERAL EDUCATIONAL NOTES

A committee of the Central Trade and Labor Council of Allentown, Pennsylvania, has suggested that the Manufacturers Association and the School Board co-operate with their own committee to the end that the subject of vocational training be developed to best suit the local requirements of the vicinity.

Miss Mary Conway and Superintendent of Schools Condon, of Cincinnati, have pointed out to the School Board of that city the value of co-operation between the public schools and the garmentmakers' factories and the necessity of having skilled workers to give instructions to the pupils who will probably enter the trade where sewing is the primary requisite. The Business Men's Club of that city is co-operating in the movement.

Whether rich or poor, Miss Sophie Kerr, one of the editors of the *Woman's Home Companion*, affirms, "Every American girl should have at least two years' industrial training. On reaching the age of nineteen the girl should be given training for self-support and then should earn her own living for the period stated."

According to a report made by the Bureau of Occupations of New York City, most women who have been graduated from college desire to earn their living by their pens. The report further states that there is no noticeable rush of applicants for the position of household administrator.

Superintendent O. L. Reid of the public schools of Louisville, Kentucky, in a recent address to the Woman's Club of that city, strongly advocated the training of girls for the industries which offer employment to the graduates of the public schools. Mr. Reid felt that emphasis should be placed upon training for the work that is offered in Louisville first, and, second, on training for work which might be secured outside of the vicinity. Mr. Reid believes that vocational education can no longer be delayed.

There is a bill in the Legislature of New York State to compel those children who have left school to go to work but who are not employed to return to school. The bill, if passed, will relate to children between the ages of fifteen and eighteen and who have not been graduated from the elementary schools.

The University of Utah recently asked the business men of Salt Lake City to a conference where suggestions were made as to means of starting a school of commerce and finance in connection with that institution. The plan was unanimously favored.

Recently there was held at Worcester a conference of home-making teachers in Massachusetts. "Home-making teachers" has the right ring to it.

An industrial course for boys and a household arts course for girls, each for a term of four years, will be added to the course of study at the technical high school of Scranton, Pennsylvania.

Women inmates of the Kansas State Penitentiary have been enrolled in home economics by correspondence in the Division of Extension in the Kansas State Agricultural College. More than two hundred men in Kansas prisons are doing work under the supervision of the Home Study Department, but the association of these women with the college is an innovation in educational practices.

Thirty-four nationalities are represented in public school Number 4 of Long Island City, New York. This statement gives some idea of the educational problems of a country made up of the citizens of many countries.

An event of more than passing interest was the graduation of the evening students at the Bradford Durfee Textile Schools of Fall River, Massachusetts. William Evans, Vice-President of the school, delivered an address in which he said that he thought that, if more of the working class knew and appreciated the advantages of a course of study at the school, the classes would be considerably enlarged and he hoped to see such developments in the future.

Perry Davidson, writing in the Lexington, Kentucky, *Herald*, gives a graphic account of how education is abolishing feuds among the mountaineers of that state: "Ignorance is always at the root of such trouble, and Oneida Institute has proved it. While we shall likely continue to have an occasional 'killing,' the feuds are dead in Clay and adjoining counties. A seventeen years' fight against the root of the evil, illiteracy and its accompaniments, has banished them. And into this seventeen years is compressed the history of this mountain school. Compressed is used quite selectively and discriminatingly. The years have been full of action and change, but every inch of the way has been bitterly contested by the forces and evils which are being supplanted."

The first military industrial school for troops in the service was opened at Superior, Wisconsin, on April 18th. Three hundred and eighty-four enrolments were listed, ranging from 23 to 93 in the various classes. Soldiers off duty will be instructed in locomotive and stationary engineering, Morse and wireless telegraphy, field telephony, operation and mechanism of autos, trucks and motorcycles, hippology and the care and treatment of horses and mules, topography, drawing and reading of maps, typewriting and shorthand, building and bridge construction.

The *Mothers' Magazine* believes that our school system operates more favorably toward the girl than toward the boy. "One reason boys are leaving school so early is because they find little or no work which is suited to their needs. Of course, it would be better if school work could be more fully adapted to the needs of girls than it is now, but still girls adjust themselves to the school program more easily, contentedly and with less complaint than do the boys. Therefore, if a school cannot have both domestic science and manual training, but can have one, it should have the latter. It should be very concrete and practical."

The Massachusetts Institute of Technology has entered into a co-operative agreement with several industrial concerns. In such cases this institution throws its laboratories open to the company for the conduct of such scientific investigations as it may have under way or which it may propose in the future. This makes available to the company in the first instance a laboratory specialized to the needs of its particular branch of industry in a way which the company itself could only duplicate at large expense. Yet Tech offers still more. At the institute there is available a whole system of related laboratories such as no one industrial concern would ever possess. If some phase of the work to be done calls any one of the related laboratories into requisition, its facilities and service are available. This arrangement has, of course, important advantages to the institute itself, since it links Technology still more closely to practical industrial and commercial work, and at the same time adds to the distinction of the institute as a servant of all the public.

The Civic League of Portland, Oregon, is making a survey to determine the educational needs of that city and special emphasis will be placed on practical training and the need for vocational direction and work.

Farm and Fireside, one of the leading farm publications of this country, characterizes the vocational educational bill, passed by Congress, as "the greatest single piece of educational legislation the federal government has ever enacted."

A vocational survey of Los Angeles and vicinity has been made by the Los Angeles High School, in order to learn the nature of positions open to high school students and graduates, so that courses may be offered both in the Junior College and the high school to fit students for practical positions in life. The survey has been made at the instigation of the Chamber of Commerce, the Merchants' and Manufacturers' Association, the College Women's Club and the Civil Service Bureau.

The extension of continuation classes throughout New York City is strongly urged in a report just submitted to the Board of Education. The recommendations made include the adoption of a definite educational policy for this department and the organization of a division of vocational guidance and placement. Three years ago the first continuation class was established in a Brooklyn department store. Since then forty-eight have been opened in all the boroughs of the city. The majority are in department stores, the rest in shops, social settlements, restaurants and in one publishing house. There are about 2,500 pupils taking advantage of these opportunities, most of them over sixteen years of age. These continuation classes are the natural outgrowth of the evening school work in this city. Long experience has shown that evening school instruction is not, on the whole, profitable for working children under sixteen. The Wilmot law, passed in 1913, made it possible for any city in the state to organize day continuation classes and to compel those children who have not completed the eighth grade to attend from four to eight hours a week. It was thought best, however, by local authorities to make these classes voluntary at first.

About 2,500 farmers, men, women and children, took advantage of the Purdue University short courses this year. Practically every county in the state of Indiana was represented in the enrollment. "There were addresses on numerous subjects of interest to the modern farmer; corn shows and many other exhibits and contests were held; instruction was given in scientific methods of crop cultivation and in other agricultural problems. More than 500 boys and girls attended, the boys taking courses in corn and pig judging, poultry raising, fruit culture and dairying; the girls in bread-making, canning, butter-making and sewing. The boys' and girls' clubs of the state last year marketed crops to the value of \$66,939.20. The importance of this work to the state," said the *Indiana News*, "is not to be measured solely in dollars and cents, but in the inculcation of scientific methods of cultivation."

In Massachusetts the State Board of Education has appointed Miss Louisa I. Pryor of Portsmouth, N. H., as agent in charge of vocational work for women and girls and as an assistant to the deputy commissioner in charge of vocational education.

Harry Kelly, Chairman of the Educational Committee of the Society of Master House Painters and Decorators of Massachusetts, in a recent address on the trade schools in Boston, said: "It is not too much to say that unless something is done to interest more apprentices in this business, in a few years it will be known as one of the lost arts. We believe in trade schools, and I think that such schools should teach painting and decorating."

Chicago has joined the procession of cities which are making surveys of their schools to determine their efficiency in

meeting the requirements in education of the community which they serve.

The Butte, Mont., *Miner* closes an extended editorial "On the New Education" as follows: "Down to a few words, concretely the newer education has for its objective chiefly the determination and teaching of that most helpful to the youth without overlooking its obligation to afford opportunities for cultural advancement and the duty of preparing the rising generation to become good citizens."

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